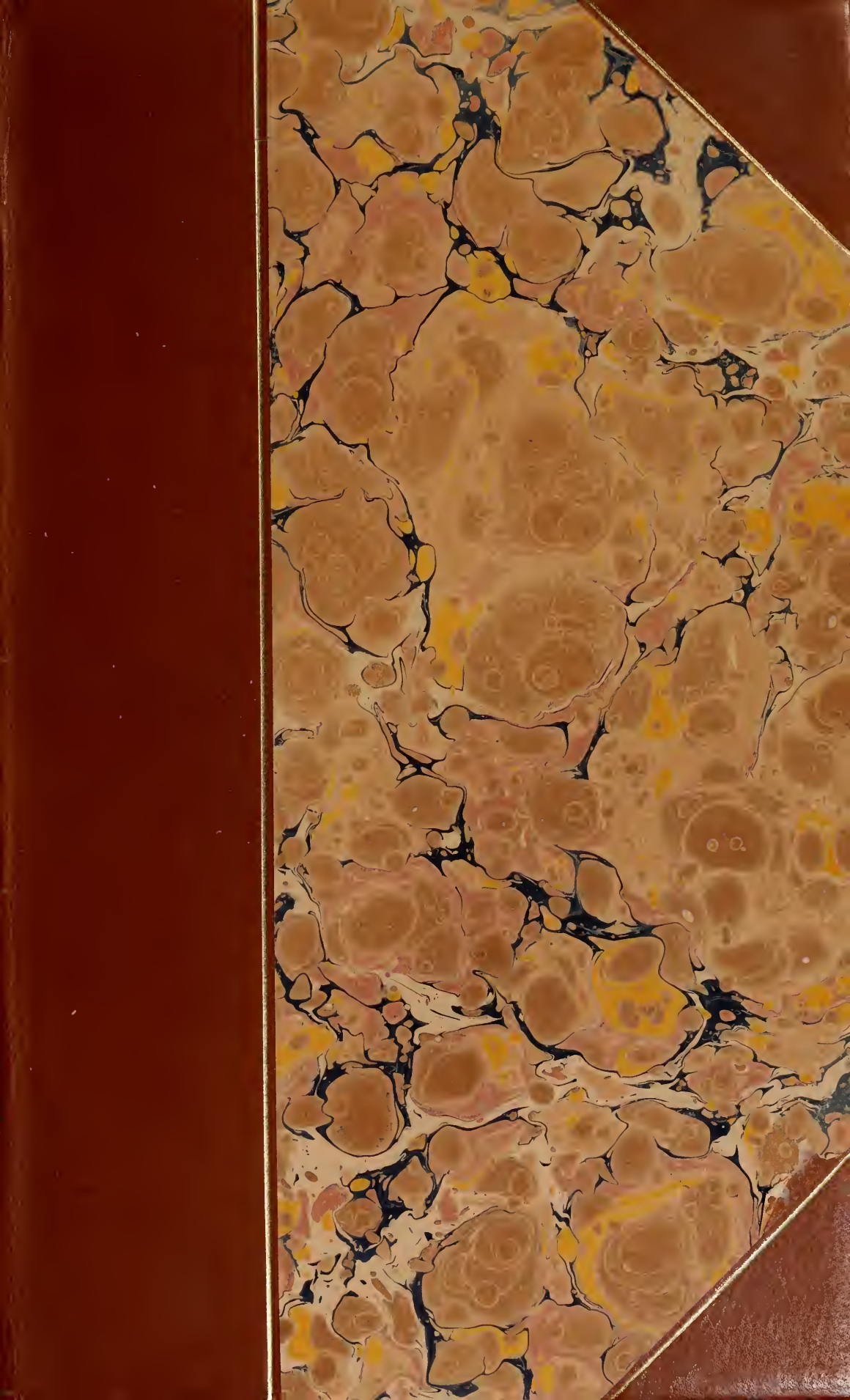

THE

NATURAL HISTORY

OF

BRITISH SHELLS,

INCLUDING

FIGURES AND DESCRIPTIONS

OF ALL THE

SPECIES HITHERTO DISCOVERED IN GREAT BRITAIN,

SYSTEMATICALLY ARRANGED

IN THE LINNEAN MANNER,

WITH

SCIENTIFIC AND GENERAL OBSERVATIONS ON EACH.

VOL. II.

BY E. DONOVAN, F.L.S.
AUTHOR OF THE NATURAL HISTORIES OF
BRITISH BIRDS, INSECTS, &c. &c.

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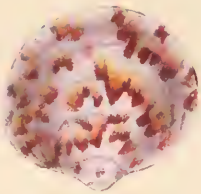

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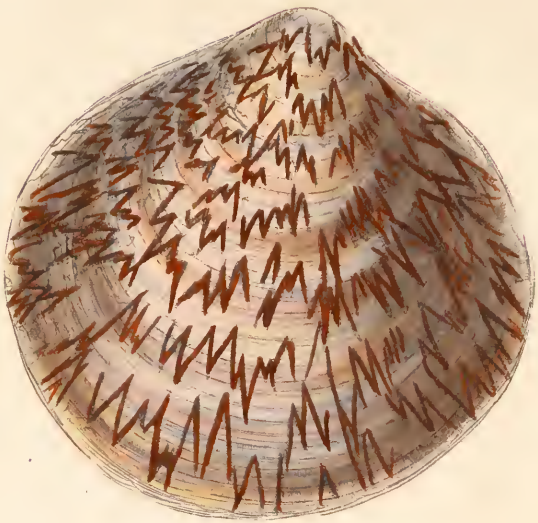

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NEW YORK
OF NATURAL HIST

THE

NATURAL HISTORY

OF

BRITISH SHELLS.

PLATE XXXVII.

ARCA GLYCYMERIS.

ORBICULAR ARK.

GENERIC CHARACTER.

Bivalve, valves equal. Teeth of the hinge numerous, and inserted between each other.

SPECIFIC CHARACTER
AND
SYNONYMS.

Orbicular, concave, very finely striated transversely and longitudinally, and variegated with zigzag marks. Margin crenated.

ARCA GLYCYMERIS: testa suborbiculata gibba, substriata, natibus incurvis, margine crenato. *Linn. Syst. Nat. p.* 1143. *No.* 181.

Chama glycemeris, Bellon. Pectunculus ingens variegatus ex rufo. *List. H. Conch. tab.* 247. *fig.* 82.

Concha crassa, lævis, subalbida, luteis maculis radiata, signata, fasciata, et virgulata, intus macula fusca obscurata. *Gualt.* 1. *Conch. tab.* 72. *fig. G.*

Glycymeris cornubiensis crassa marmorata. *Mus. Petiv. p.* 84. *No.* 816.

Bastard, or dog's cockle. *Rutty Dublin, p.* 379.

Arca glycymeris, orbicular, *Penn. Br. Zool. No.* 58. *tab.* 58. *fig.* 58.

Glycymeris. Orbicularis crassa subalbida lineis rufulis sagittæformibus variegata, intus obfuscata margineque crenato. Orbicularis. *Da Costa. Br. Conch. p.* 168, *tab.* 11. *fig.* 22.

This species is found, of a large size, in the Mediterranean sea; those which inhabit the English coast, as Falmouth and Cornwall, rarely exceed the size of the smallest specimen we have represented. It is found likewise on the shores of Guernsey, and the coast of Ireland, where it is called the *dog's cockle*.

PLATE XXXVIII.

MUREX CORNEUS.

HORNY, or SLENDER WHELK.

GENERIC CHARACTER.

Spiral, rough. The aperture ending in a strait, and somewhat produced gutter, or canaliculation.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Slender, white. Spires eight, swelled. Mouth oblong oval, ending in a produced or lengthened deep twirled gutter.

MUREX CORNEUS: testa oblonga rudi, anfractuum marginibus complanatis, apice tuberculoso, apertura edentula, cauda adscendente. *Linn. Syst. Nat. p.* 1224. *No.* 565.

Buccinum angustius, tenuiter admodum striatum, octo minimum spirarum. *List. H. An. Angl. p.* 157. *tit.* 4. *tab.* 3. *fig.* 4.—*App. H. An. Angl. p.* 15, 16.

Lesser long and smooth whelke, *Dale Harw. p.* 381. *No.* 2.—*Smith Cork, p.* 401. *No.* 7.

Narrow-mouthed whelke, with eight wreaths. *Wallis Northumb p.* 401. *No.* 7.

Murex corneus, Horny. *Penn. Brit. Zool. No.* 99. *tab.* 76. *fig.* 99.

Buccinum canaliculatum medium, angustius, album, striatum, octo spirarum. GRACILE *Da Costa, p.* 124. *sp.* 74. *tab.* 6. *fig.* 5.

PLATE XXXVIII.

This shell is white, semitransparent, and rather glossy; and when alive is covered with a fine thin brown film, or epidermis, which is striated spirally. It is found on several of the English coasts, as Yorkshire, Northumberland, Essex, &c. and also on the shores of Scotland and Ireland.

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PLATE XXXIX.

FIG. I.

HELIX CORNEA.

RAM'S HORN.

GENERIC CHARACTER.

Aperture of the mouth, contracted, and lunated.

SPECIFIC CHARACTER
AND
SYNONYMS.

Wreaths, four, turned nearly horizontal: rather depressed or concave towards the centre.

HELIX CORNEA: testa supra umbilicata plana nigricante, anfractibus quatuor teretibus. *Lin. Syst. Nat. p.* 1243. *No.* 671. —*F. Suec. I. p.* 373. *No.* 1304. *II. No.* 2179.

Cochlea pulla, ex utraque parte circa umbilicum cava. *List. H. Angl. p.* 143. *tit.* 26. *tab.* 2. *fig.* 26.

Cochlea maxima, compressa, fasciata. *List. H. Conch. tab.* 136. *fig.* 40.—Cochlea pulla quatuor orbium coccum fundens, purpura lacustris. *Id. tab.* 137. *fig.* 41.

The Flat Whirl. Grew. Mus. p. 136.

Planorbis fluviàtilis major vulgaris. *Petiv. Gazoph. tab.* 92. *fig.* 5.

Helix Cornea, Horny. *Penn. Br. Zool. No.* 126. *tab.* 83. *fig.* 126.

PLATE XXXIX.

Helix fluviatilis depressa major, anfractibus quatuor, ex utraque parte circa umbilicum cava. Cornu arietis. *Tab.* 4. *fig.* 13. Da Costa *Br. Conch. p.* 60. *tab.* 4. *fig.* 13. Purpura. S. Cochlea fluviatilis compressa major. *List. Exerc. Anat.* 2. *p.* 59.

The adult shells of this species are from three quarters of an inch, to an inch and a quarter in diameter; the colours various, generally brownish or ashen colour, inclining in some to red, in others to yellow; the young shells are whitish and more transparent.

It is very common in ponds and rivers. The animal is blackish brown, and has two red capillary horns *.

The Helix Nana, or Dwarf of Pennant, fig. 125, is considered by Da Costa and other conchologists, as a young shell of this species.

* " This fish emits a fine *scarlet humour*, if a grain of salt of any kind, or a little pepper or ginger, be put into the mouth of the shell. It emits this fine scarlet humour all the year, especially in April and September. Dr. Lister gives a full account of it. He says, this scarlet humour may be readily got, and in great quantity, if a large parcel of these shells be wrapped up in a cloth bag, sprinkling over it a little salt; then the scarlet liquor will ouze plentifully. The colouring part of this humour immediately subsides, if sprinkled with powdered allum, and the rest of it remains like clear water. The colouring part may be strained through a filtering paper, but the elegance of its colour is lost, and it changes into a dull, unpleasant rusty brown. Moreover, if mixed with vinegar, spirit of wine, deliquated vegetable salts, or common salt dissolved, this elegant scarlet colour perishes in the same manner as when mixed with allum. Neither can this liquor be kept by itself pure and unmixed; for in vain did the doctor strive to preserve it in narrow mouthed bottles or phials, perfectly well closed, and with oil or honey thrown over it. Thus this colour is of so fugitive a nature, that no acid or astringent has been found sufficient, to preserve the elegance of its tint."

" Dr. Lister further recites some observations and experiments he made on this scarlet fluid, to discover whether it was a humour of the body, or to be got by laceration or incision, as blood; a saliva from the throat or stomach; or a particular humour contained in certain vessels or parts; but the nicety and difficulty of the experiments rendered it impossible for him to determine it precisely." Da Costa, page 61, 62.

PLATE XXXIX.

FIG. II.

HELIX LAPICIDA,

ACUTE EDGED.

SPECIFIC CHARACTER

AND

SYNONYMS.

Above and beneath rather convex; back of the wreaths carinated. Deeply umbilicated.

HELIX LAPICIDA: testa carinata umbilicata utrinque convexa, apertura marginata transversali ovata. *Linn. Syst. Nat. p.* 1241. *No.* 656.

Cochlea testa utrinque convexa, subtus perforata, spira acuta apertura ovata transversali. *Linn. Faun. Suec.* 1. *p.* 371. *No.* 1298. 11. *No.* 2174.

Cochlea pulla, sylvatica, spiris in aciem depressis. *List. H. An. Angl. p.* 126. *tit.* 14. *tab.* 2. *fig.* 14.

Cochlea nostras, umbilicata, pulla. *Hist. H. Conch. tab.* 69. *fig.* 68.

Planorbis terrestris Anglicus, umbilico minore, margine acuto. *Mus. Petiv. p.* 69. *No.* 734.

Cochlea terrestris media acie acuta: land cheese shell with a sharp edge. *Petiv. Gaz. tab.* 92. *fig.* 11.

Helix Lapicida. ROCK. *Penn. Br. Zool. No.* 121. *tab.* 83. *fig.* 121.

Cochlea umbilicata, margine in acie acuto depresso, ACUTA. sharp. *Da Costa Br. Conch. p.* 55. *tab.* 4. *fig.* 9. 9.

PLATE XXXIX.

This species is found in several countries of Europe. In Great Britain it seems to be a local and rather uncommon kind. Da Costa says "though found in many parts of England, is not met with in any plenty, but is scarce. I have found them on the rocks, at and near Matlock, in Derbyshire, about Bath, in Somersetshire, also on rocks; in Surrey, Wiltshire, and Hampshire, in the moss on the bodies of large trees, and in woods. Dr. Lister found them on the grass in Lincolnshire; Mr. Petiver, in hedges, between Charlton and Woolwich, in Kent*; Mr. Morton, in hedge-bottoms, in Oakly Parva, in Northamptonshire; and Mr. Wallis, on the rocks in Northumberland: but they are not common or frequent any where." page 56.

* Not uncommon last summer in the woods of Kent.

PLATE XL.

MYTILUS UMBILICATUS.

UMBILICATED, OR WRY BEAK MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER
AND
SYNONYMS.

Hinge much depressed and bent inwards.

MYTILUS UMBILICATUS, umbilicated. *Penn. Br. Zool. sp.* 76. *fig.* 76.

MYTILUS CUROIROSTRATUS. WRY BEAK. *Da Costa Br. Conch. p.* 220. 50.

We are informed by Pennant that this shell was discovered by the Reverend Hugh Davies; that it is a rare and new species, and is sometimes dredged up off Priestholme Island, Anglesea.

It is about half the size of Mytilus Modiolus, and in some respects resembles it; but is distinguished by the very remarkable and peculiar

structure of its hinge; the space opposite to it is bent inwards, in a winding manner, into a deep rugged cavity, which when the shells are closed, form a deep hollow, or umbilicus, as if bruised in. On one valve this depression is more deeply inflected inwards than on the other.

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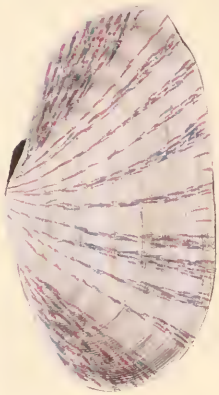

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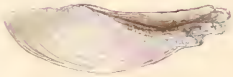

PLATE XLI.

FIG. I.

TELLINA INÆQUIVALVIS.

UNEQUAL-VALVED TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER
AND
SYNONYMS.

Oblong, one side much produced or beaked; upper valve flat, lower very convex.

TELLINA INÆQUIVALVIS: testa oblongo-rostrata, valva altera plana.
Gmel. Lin. Syst. Nat. Conch. 3233. *sp.* 23.

The *Tellina inæquivalvis* is noticed by *Gmelin* as a native of the Mediterranean and Norway seas, but has not been hitherto described as a British shell by any author. It is generally admitted by Conchologists that the species has been discovered on our shores, and William Pilkington, Esq. of Whitehall, has very lately received a specimen of it from the Guernsey coast, which he obligingly favoured us with it to figure and describe.

PLATE XLI.

FIG. II.

TELLINA VARIABILIS.

SPECIFIC CHARACTER.

Shell somewhat oval or oblong, radiated with pale red streaks; a single tooth in the hinge of one valve, which is inserted between two teeth on the other valve, when shut.

SOLEN VESPERTINUS: testa ovali oblonga spadiceo-radiata, cardinis sinistræ valvæ dente solitario duplici alterius inserto. *Gmel. Lin. Syst. Conch. p.* 3228. *sp.* 20.

This is the *Tellina variabilis* of the late Dr. *Solander*, and the *Portland Museum*; Gmelin arranges it amongst the Solens.

Found on the coast of Cornwall and Weymouth, and not noticed by either *Pennant* or *Da Costa* as an English shell.

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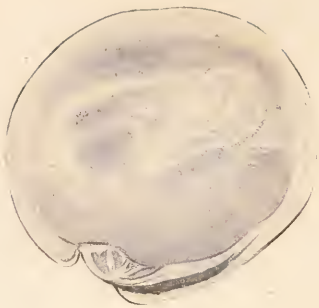

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PLATE XLII.

FIG. I.

VENUS EXOLETA.

ANTIQUATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER.

Subrotund. Wrought transversely with numerous regular and minute striæ, margins smooth.

VENUS EXOLETA: testa lentiformi transversim striata pallida, obsolete radiata, ano cordato. *Linn. Syst. Nat. p.* 1134. *No.* 142.

Concha testa subrotunda: striis transversis innumeris, margine lævi. *F. Suec.* 1, *p.* 383, *No.* 1342.

Pectunculus rostro productiore, capillaceis fasciis donatus. *List. H. Conch. tab.* 290. *fig.* 126.—P. dense fasciatus, ex rubro variegatus et undatus. *Tab.* 291. *fig.* 127.—P. crassus, dense fasciatus, leviter ex rufo variegatus. *Tab.* 292. *fig.* 128.—P. subfuscus tenuiter admodum fasciatus. *Tab.* 293. *fig.* 129. P. planus, crassus, ex-rufo radiatus. *Tab.* 299. *fig.* 136.

Concha marina valvis æqualibus æquilatera, notabiliter umbonata et oblique incurvata, subrotunda, vulgaris, striis densissimis et profundis transversim striata et exasperata, candida leviter ex fusco variegata et radiata. *Gualt.* 1. *Conch. tab.* 75. *fig. F.*

PLATE XLII.

Venus exoleta, antiquated. *Penn. Br. Zool. No.* 49. *tab.* 54. 55.—49 & 49 *A.*

Pectunculus planus, crassus, striis capillaceis dense striatus. CAPILLACEUS, HAIR-STREAKED. *Da Costa. Brit. Conch. p.* 187. *sp.* 24.—*Tab.* 12. *fig.* 5. 5.

Found in plenty on several of the British shores, as Cornwall, Dorsetshire, Devonshire, and Yorkshire; also in the isle of Guernsey, and those of the Orkneys.

FIG. II.

VENUS SINUOSA.

A. INDENTED VENUS SHELL.

SPECIFIC CHARACTER.

Thin, convex, a deep obtuse *finus*, or bending on the front. *Penn. Br. Zool. p.* 95. *sp.* 51.

Figured and described by Pennant, from a specimen in the Portland cabinet, that was found at Weymouth. The shell we have figured is in the collection of the Rev. T. Rackett.

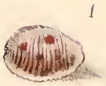


PLATE XLIII.

CYPRÆA PEDICULUS.

SEA LOUSE COWRY, OR NUN.

GENERIC CHARACTER.

Sub-oval, blunt at the ends. Aperture, length of the shell, longitudinal, linear, toothed.

SPECIFIC CHARACTER

AND

SYNONYMS.

Convex, margined, and furrowed transversely across the back.

CYPRÆA PEDICULUS testa marginata transversim sulcata. *Linn Syst. Nat. p.* 1180. *No.* 364.

Concha veneris exigua, alba, striata, Nuns. *List. II. Conch. tab.* 707. *fig.* 57.

Concha veneris exigua purpascens, striis minimis transversis, tribus maculis fuscis dorso inspersa. The purple spotted nuns, *alias cowrie*, &c.—Concha veneris minima nullis maculis insignita. The smallest nuns without spots. *Borlase Cornw. p.* 277. *tab.* 28. *fig.* 12. 13.

Pou de Mer—*Argenv. Conch.* 1. *p.* 310. *tab.* 21. *fig. L. II. p.* 270. *tab.* 18. *fig. L.*

Porcellana vulgaris, parva, globosa, striata, candida, dorso sinuato. *Gualt.* 1. *Conch. tab.* 14. *fig. P.* & *tab.* 15. *fig. R.*

PLATE XLIII.

Cypræa pediculus, common. *Penn. Brit. Zool. No.* 82. *tab.* 70. *fig.* 82.

Cypræa exigua transversim striata, maculæ fuscæ dorso inspersa. Pediculus, seu monacha. *Da Costa Br. Conch. p.* 33. *sp.* 18. *tab.* 2. *fig.* 6. 6.

This shell is very common on our shores, and a variety of the same species is also abundant in the West Indies. The English shells of this kind are of various tints, generally whitish, and with or without spots; the exotic kind is distinguished by a furrow on the back.

PLATE XLIV.

VENUS VERRUCOSA.

WARTED VENUS SHELL.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER AND SYNONYMS.

Somewhat heart shaped. Deeply decussated on the sides, with transverse and oblique furrows, which form membraneous protuberances or warts. Margins finely crenated.

VENUS VERRUCOSA: testa subcordata: sulcis membranaceis striatis reflexis, antice imprimis, verrucosis, margine crenulato. *Linn. Syst. Nat. p.* 1130. *No.* 116.

Pectunculus omnium crassissimus, fasciis ex latere bullatis donatus. *List. H. Conch. tab.* 284. *fig.* 122.

Concha marina valvis æqualibus æqualitera, notabiliter umbonata et oblique incurvata, subrotunda, vulgaris, striis circularibus profundis, elatis, bullatis exasperata, et circumdata, crassa, subalbida. *Gualt.* 1. *Conch. tab.* 75. *fig. II.*

Concha cinerea densa, margine dentato, striis rugosis et é lateribus undose tuberculosis. The wrinkled, notched, and high-beaked concha, or cockle. *Borlase Cornw. p.* 278. *tab.* 28. *fig.* 32.

PLATE XLIV.

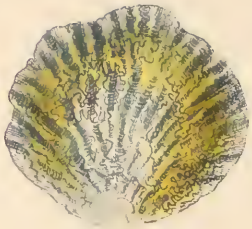
Clonisse de la Mediterranéé *d'Avila. Cab. p.* 333. *No.* 762.

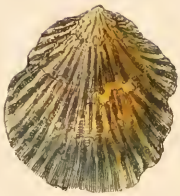
Venus Erycina, Sicilian. *Penn. Brit. Zool. No.* 48. *tab.* 54. *fig.* 48.

Cornwall heart cockle, with rugged girdles. *Petiv. Gazoph. tab.* 93. *fig.* 17.

Pectunculus crassissimus strigatus, strigis ex latere bullatis, strigatus, ridged. *Da Costa Br. Conch. p.* 185. *sp.* 3. *Tab.* 12. *fig.* 1. 1.

Da Costa says, "this species is rare in our seas. The shores of Cornwall afford them, and they have been got in Devonshire and Dortsetshire." They have also been found on the eastern coast of Sussex, but not frequently.





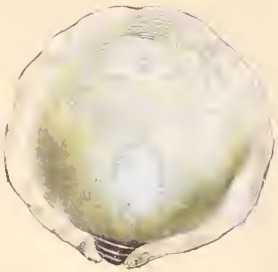


PLATE XLV.

OSTREA STRIATA.

STRIATED OYSTER.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve, unequal. Hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Less than the common Oyster. Outside wrought with thread-like longitudinal ridges. Inside green.

OSTREUM STRIATUM: mediæ magnitudinis veluti striatum intus virescente. *Da Costa. pl.* 11. *fig.* 4. 4. *p.* 162. *sp.* 9.

Ostreum parvum veluti striatum, testa intus virescente, cardine utrinque canaliculato. *List. H. An. Angl. p.* 181. *tit.* 27. *tab.* 4. *fig.* 27.

Ostrea fere circinata, subviridis, leviter striata. *List. H. Conch. tab.* 202. 203. *fig.* 36. 37.

An Ostreum vulgare, striatum, striis rotundis, crassioribus, interruptis radiatum, squamosum ex fusco viridescens. *Gualt.* 1. *Conch. tab.* 102. *fig. B?*

PLATE XLV.

" This Oyster," says Da Costa, " hitherto *only proposed* and described by Dr. *Lister*, is a very different species from the *common Oyster*, but has been always overlooked as the same kind." Dr. Lister observes that it is found in plenty at the mouth of the river *Tees*, in Yorkshire, and says he first eat of it at *Bourdeaux*, in France, where it is greatly esteemed and called Rock Oyster, being found among the rocks.

The figure of this shell in the plate of Da Costa above quoted, is so very indifferent and devoid of true character, that were we not in possession of the specimen he represents, it would be difficult to ascertain it. In the general description he says the outside is a little uneven, *but not rugged* nor of *a leaved or flakey structure* as the common Oyster: he adds that the ridges are longitudinal, about the thickness of a thread, very numerous, irregular, and run one into another; but towards the bottom always furcate or divide. This description is accurate but does not accord with the figure, in which the longitudinal ridges appear of a flakey structure or like laminæ, and not numerous, irregular threadlike striæ as in the shell. We have selected several characteristic specimens of this species in the annexed plate.

This shell is thick, strong, and nearly opake: it is usually about an inch in diameter; the valves unequal, the under one being very concave, the upper one flattish. Within, it is of a livid green and rather glossy, the hinge broad, deep, somewhat triangular and striated transversely. In many shells there is a remarkable white mark exactly resembling a thick spot of white oil paint, placed a little below the hinge, this spot always appears in radiated wrinkles from the centre, and is formed by the muscle of the shell.

It is found on many of our shores, as Kent, Sussex, Dorsetshire, &c. in abundance, and of various colours; some are very fine like japan lacquer, and others of a violet, green, pink, yellow or pearly tint when much worn. It is remarkable, however, that the upper valves are so scarce, that hundreds of the lower valves are found to one of them.

PLATE XLVI.

SOLEN SILIQUA.

LARGE or POD SOLEN.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell. Animal an Ascidia.

SPECIFIC CHARACTER
AND
SYNONYMS.

Shell strait, equally broad, and compressed. The hinge beset with two teeth in each valve.

SOLEN SILIQUA: testa lineari recta cardine altero bidentato. *Linn. Syst. Nat. p.* 1113. *No.* 34.—*Fn. Sv.* 2. *No.* 2131.

Solen, lævis, albidus, candidus, ex fusco & subroseo colore variegatus et fasciatus. *Gualt.* 1. *Conch. tab.* 95. *fig. C.*

Concha fusca, longissima, angustissimaque, musculo ad cardinem nigro, quibusdam solen dicta. *List. H. An. Angl. p.* 192. *tit.* 37. *tab.* 5. *fig.* 37.—*App. H. An. Angl. p.* 19.—*App. H. An. Angl. Goedart, p.* 33.

PLATE XLVI.

Solen major, subfuscus, rectus. *H. Conch. tab.* 409. *fig.* 255.

Solen unguis; the ſheath, razor, or spoutfish. *Grew Mus. p.* 143. —*Merret Pin. p.* 193.

Solen sive concha tenuis longissimaque ab utraque parte naturaliter hians; the spout fish. *Wallace Orkneys, p.* 45.

Solen noſtras vulgaris. *Muſ. Petiv. p.* 87. *No.* 844.

Solen major subfuscus rectus. SILIQUA. *Da Costa. tab.* 17. *fig.* 5. *p.* 235. *sp.* 59.

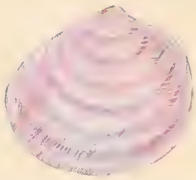
This shell is found in abundance on many of the English shores, especially the northern and western coasts, and those of Scotland and Ireland.

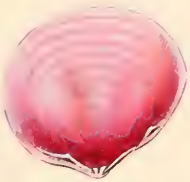
The antients esteemed this fish a delicious food, and Dr. Lister informs us he thought it nearly as rich and palatable as the Lobster. In England and Scotland it is at present mostly used for baits, and not for the table; but in Ireland is much eaten in Lent.—It is in season in spring.

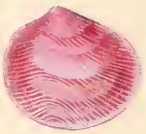
From the hinge to the opposite margin the length is about half an inch, and its breadth from five to seven inches; but some shells are found much larger. The outside is covered with a thin transparent yellow-brown cuticle or epidermis, like glue, which peels off soon after the fish is dead or exposed to the shores. Under this epidermis the shell is smooth, very glossy, and marked with many concentric transverse wrinkles from the middle to one extreme, the other half is striated lengthways. Inside white and glossy.

PLATE XLVI.

Da Costa Obs.—Mr. Wallis, in his History of Northumberland, p. 396. No. 9. notes a sort of this shell he calls the *Orange and White Solen*, found in *Budle Sands* with this *common sort*, and in *all respects like it, except in colour*, which is deep orange and white in transverse fillets, in alternate variegations. *Quere, if a distinct species, or only a variety?*







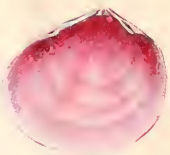


PLATE XLVII.

TELLINA CARNARIA. *Linn.*

FLESH-COLOURED TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER.

Somewhat orbicular; valves shallow. White tinged with rose colour, and marked externally with numerous parallel striæ, disposed in an oblique, reflexed and transverse direction.

TELLINA CARNARIA: testa suborbiculata lævi utrinque incarnata oblique striata: striis hinc reflexis. *Linn. Syst. Nat. p.* 1119. *No.* 66.

Concha parva subrotunda, ex parte interna rubens. *List. H. An. Angl. p.* 175. *tit.* 25. *tab.* 4. *fig.* 5.

Tellina æquilatera lævis, tenuis subrubra. *Gualt.* 1. *Conch. tab.* 77. *fig.* 1.

Cardium parvum subrotundum oblique striatum colore carneoso. Carneosum. *Da Costa. p.* 181. *sp.* 20.

PLATE XLVII.

According to Dr. Lister this species is a shore shell, and found very frequently in the shallows of Lancashire, and near Filey in Yorkshire, &c. It is also found at Scarborough, Dorsetshire, Devonshire, and Cornwall.

It is an elegant shell, the outside being beautifully marked with numerous delicate striæ like strokes of engraving, and tinged with a fine rose or flesh colour. Some specimens are almost white, or white with transverse bands of deeper red, and the margins yellow. Within, the red colour is much more vivid than the outside.

Da Costa has placed this species in the *Cardium* genus, and indeed with much propriety; though Linnæus arranges it amongst the *Tellens*. It has a tendency on one side to flexure or slope like the Tellens, but the central and remote lateral teeth we think ſhould remove it to the former genus.

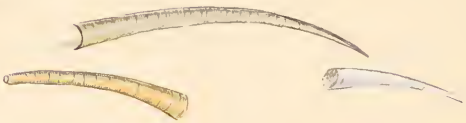


PLATE XLVIII.

DENTALIUM ENTALIS.

TOOTH SHELL.

GENERIC CHARACTER.

Animal a Terebella. Shell slender, tubiform.

SPECIFIC CHARACTER

AND

SYNONYMS.

Tubular, conical, somewhat curved, and open at both ends.

DENTALIUM ENTALIS: testa tereti subarcuata continua lævi. *Linn. Syst. Nat. p.* 3736. 332. *sp.* 3. *a Gmel.*

Dentale læve album, altera extremitate rufescens. *List. H. Conch. tab.* 547. *fig.* 2.

Tubulus marinus regulariter intortus arcuatim incurvatus, & versus unam extremitatem acuminatus, dentalis dictus, lævis, candidus. *Gualt.* 1. *Conch. tab.* 10. *fig. E.*

Dentale læve, curvum album. *Borlase Cornw. p.* 276. *tab.* 28. *fig.* 5.

PLATE XLVIII.

ANTALES *Argenville Conch.* 1. *p.* 246. *tab.* 7. *fig. K. II. p.* 196. *tab.* 3. *fig. K.*

Dentale læve albescens. Vulgare. *Da Costa. Br Conch. p.* 24. *tab.* 2. *fig.* 10.

This singular shell is found on many of the British shores, but rarely occurs perfect. It is abundant on our southern shores, as Hampshire, Devonshire, &c.

PLATE XLIX.

OSTREA MAXIMA.

GREAT SCALLOP.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve, unequal. Hinge without a tooth, having a ſmall oval cavity.

SPECIFIC CHARACTER AND SYNONYMS.

Upper valve flat, lower concave. About fourteen rounded longitudinal ribs, which are also deeply striated.

OSTREA MAXIMA: testa inæquivalvi radiis rotundatis longitudinaliter striatis. *Linn. Syst. Nat. p.* 1144 *No.* 185.

Concha testa aurita, striis quatuordecim. *Linn. F. Suec. I. p.* 383. *No.* 1343. *II.* 2148.

P. maximus, circiter quatuordecim striis, admodum craſſis & eminentibus et iisdem ipsis striatis inſignitus. A Scallop. *List. H. An. Angl. p.* 184. *tit.* 29. *tab.* 5. *fig.* 29.

Escallop, or Scallop. *Mêrret. Pin.* 193.

Scallop or Clam-shell. *Wallace Orkn. p.* 43. &c.

PLATE XLIX.

Frill or Scallop. *Hutchins Dorset. p.* 77.

Pecten Maximus. Great. *Penn. Br. Zool. No.* 61. *tab.* 59. *fig.* 61.

Pecten. Maximus inæquivalvis, costis circiter quatuordecim rotundatis, & admodum crassis. Vulgaris, the common scallop. *Da Costa Br. Conch. p.* 140. *tab.* 9. *fig.* 3. 3.

The large Escallop is found on most of the coasts of Great Britain and Ireland, particularly on those of Portland and Purbeck in Dorsetshire.—The fish is eaten and much esteemed.

It is said by modern, as well as antient authors, that Escallops will move so strongly as to leap out of the catcher wherein they are taken: their way of leaping or raising themselves up, is by forcing the under valve against whatever they lie upon.

PLATE L.

SOLEN ENSIS.

SCYMETAR.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell.—Animal an Ascidia.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell bowed like a Scymetar, equally broad and compressed. The hinge beset with two teeth in each valve.

SOLEN ENSIS: testa lineari subarcuata, cardine altero bidentato. *Linn. Syst. Nat. p.* 1114. *No.* 35.

Solen alter curvus minor. *List. App. H. An. Angl. p.* 20.—*App. in Goed. p.* 36. *tab.* 2. *fig.* 9.—*Solen curvus. Hist. Conch. tab.* 411. *fig.* 257.—SOLEN ENSIS, SCYMETAR. *Penn. Br. Zool. No.* 22. *tab.* 45. *fig.* 22.

Solen subarcuatus. Ensis. *Da Costa. Br. Conch. p.* 237. *sp.* 60.

PLATE L.

This is a local and rare species; it has been found at Weymouth on the Dorsetshire coast, and according to Dr. Lister in plenty in the *æstuary* of the Severn, on the side of Wales.

It differs from the *Solen siliqua* in several respects; it is smaller, and not strait, but curved or bowed like a Scymetar.

2

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PLATE LI.

FIG. II.

HELIX AURICULARIA.

EAR, or WIDE MOUTH RIVER SNAIL.

GENERIC CHARACTER.

Aperture of the mouth lunated.

**** *Ovated, imperforated.*

SPECIFIC CHARACTER
AND
SYNONYMS.

Without umbilicus: a narrow depression on the edge of the pillar lip. Very ventricose, spire short and acute. Aperture very wide.

HELIX AURICULARIA: testa imperforata ovata obtusa, spira acuta brevissima, apertura ampliata. *Linn. Syst. Nat. p.* 1250. *No.* 708.

Cochlea testa diaphana anfractibus quatuor, mucrone acuto brevissimo, apertura acutissima. *Linn. F. Suec. I. p.* 376. *No.* 1315. *II. No.* 2192.

Buccinum pellucidum subflavum, quatuor spirarum, mucrone acutissimo, testæ apertura omnium maxima. *List. H. An. Angl. p.* 139. *tit.* 23. *tab.* 2. *fig.* 23.

PLATE LI.

Buccinum subflavum pellucidum, quatuor orbium, ore amplissimo, mucrone acuto. *List. H. Conch. tab.* 123. *fig.* 22.

Buccinum fluviatile pellucidum, subflavum, quatuor spirarum, mucrone acuto, testæ apertura patentissima. *List. Exerc. Anat.* 2. *p.* 54.

Turbo with four wreaths, a remarkable large mouth, and a short acute apex. *Wallis Northumb. p.* 370.

Helix auricularia. *Penn. Br. Zool. No.* 138. *tab.* 86. *fig.* 138.

Turbo subflavus pellucidus quatuor spirarum ore patulo. Patulus. *Da Costa sp.* 53. *p.* 95. *tab.* 6. *fig.* 17.

Found in plenty in rivers, ponds, &c.

FIG. II.

HELIX STAGNALIS,

LAKE SNAIL, OR FRESH WATER TURBO.

SPECIFIC CHARACTER

AND

SYNONYMS.

Without umbilicus. Oblong; spire tapering. Several prominent longitudinal wrinkles which somewhat angulates the shell. Aperture oblong oval.

PLATE LI.

HELIX STAGNALIS: testa imperforata ovata-subulata, subangulata, apertura ovata. *Linn. Syst. Nat. p.* 1249. *No.* 703.

Cochlea testa producta acuminata, opaca, anfractibus senis subangulatis, apertura ovata. *Linn. F. Suec. I. p.* 374. *No.* 1310. *II. No.* 2188.

Buccinum longum sex spirarum, omnium & maximum & productius, subflavum, pellucidum, in tenue acumen ex amplissima basi mucronatum. Turbo lævis in stagnis degens. *Aldror. de Testaceis, I.* 3. *p.* 359. *No.* 3.

Buccinum subflavam pellucidum, sex orbium, clavicula admodum tenui, productiore. *List. H. Conch. tab.* 123. *fig.* 21.

Buccinum minus fuscum, sex spirarum, ore angustiore. *List. H. An. Angl. p.* 139. *tit.* 22. *tab.* 2. *fig.* 22.

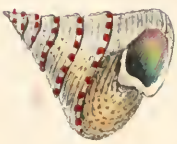
Helix Stagnalis. *Lake. Penn. Br. Zool. No.* 136. *tab.* 86. *fig.* 136.

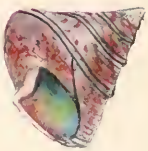
Fresh water turbo with six wreaths. *Wallis Northumb. p.* 369.

Turbo longus et gracilis in tenue acumen mucronatus, imperforatus & pellucidus Stagnalis. *Da Costa Br. Conch. p.* 93. *sp.* 52. *tab.* 5. *fig.* 11.

The largest and most produced of the British river snails, and is found in plenty in all our rivers, lakes, ponds, and other waters.

Lister and Petiver have made two species of this shell maximum and minus; they appear however to be merely different stages of its growth.





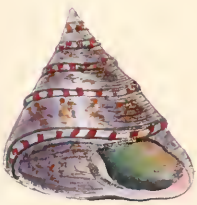


PLATE LII.

TROCHUS ZIZYPHINUS.

LIVID TOP SHELL.

GENERIC CHARACTER.

Animal a slug. Shell conic. Aperture nearly triangular.

SPECIFIC CHARACTER
AND
SYNONYMS.

Shell conic, livid, without umbilicus: spirally striated, with the upper edge of each wreath margined.

TROCHUS ZIZYPHINUS: testa imperforata conico livida lævi, anfractibus marginatis. *Linn. Syst. Nat. p.* 1231. *No.* 599.—*Faun. Suec. II. No.* 2168.

Trochus albidus maculis rubentibus distinctus, sex minimum spirarum. *List. H. An. Angl. p.* 166. *tit.* 14. *tab.* 3. *fig.* 14.

Trochus pyramidalis variegatus, limbo angusto in summo quoque orbe circumdatus. *List. H. Conch. tab.* 616. *fig.* 1.

Culs de Campe de moyenne grandeur, lisses, marbrès de rouse et de violet, à orbes separès par un cordon. *D'Avila, cab. p.* 127. *No.* 155.

PLATE LII.

Trochus Ziziphinus, livid. *Penn. Br. Zool. No.* 103. *tab.* 80. *fig.* 103.

Trochus pyramidalis imperforatus, lividus, rubro variegatus, limbo in summo quoque orbe circumdatus. Zizyphinus. *Da Costa Br. Conch. tab.* 3. *fig.* 2. 2. *p.* 37.

This is one of the moſt elegant of the testaceous tribe found on our coasts; the colour in general is fleſh colour or pale red, elegantly variegated with deeper red or brown in streaks, waves, and chequers; when the exterior coat is worn, the shell is of a fine pearly hue.

It is not an uncommon species on the English shores, and is also found in the Orkneys and the western isles of Scotland.

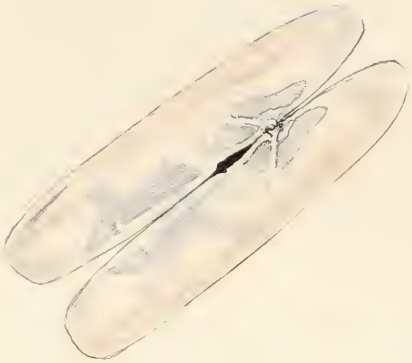


PLATE LIII.

SOLEN LEGUMEN.

PEASECOD.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell. Animal an afcidia.

SPECIFIC CHARACTER AND SYNONYMS.

Strait, oblong, rounded at both ends: smooth, and somewhat pellucid.

SOLEN LEGUMEN: curtus subpellucidus, ad chamas quodammodo accedens. Peasecod. *Da Costa. Br. Conch. p.* 238. *sp.* 61.

Solen Legumen, Suboval. *Penn. Br. Zool. No.* 24. *tab.* 46. *fig.* 24.

Concha soleniformis, lævis aut levissime striata, fragilis, pellucida, testa tenuissima cornea, subalbida, aliquando flavescens. *Gualt.* 1. *Conch. tab.* 91. *fig. A.*

Chama subfusca, angustissima, ad solenes quodammodo accedens. *List. H. Conch. tab.* 420. *fig.* 264.

PLATE LIII.

Both Pennant and Da Costa note this as a very rare British species. The first says it is found at Red Wharf, Anglesea, in North Wales; the latter received it from Christchurch, in Hampshire.

We have found it on the shores of Glamorganshire, and also in abundance in the sandy bay of Caermarthen this summer.

PLATE LIV.

CARDIUM LÆVIGATUM.

LARGE HIGH-BEAKED COCKLE.

GENERIC CHARACTER.

Two teeth near the beak, and another remote one on each side of the shell.

SPECIFIC CHARACTER
AND
SYNONYMS.

Shell somewhat oval, slightly striated longitudinally.

CARDIUM LÆVIGATUM: testa obovata: striis obsoletis longitudinalibus. *Gmel. Linn. Syst. Nat. p.* 3251. *sp.* 18.

Pectunculus maximus, at minus concavus; plurimis minutioribus & parum eminentibus striis donatus, rostro acuto, minusque incurvato. *List. H. An. Angl. p.* 187. *tit.* 32. *tab.* 5. *fig.* 32.

Pectunculus subfuscis striis leviter tantum incisis. *List H. Conch. tab.* 332. *fig.* 169.

Pectunculus major striis angustis. *Petiv. Gaz. tab.* 93. *fig.* 10.

Large high-beaked Cockle. *Wallis Northumb. p.* 395.

Cardium Lævigatum. Smooth. *Penn. Br. Zool. No.* 40. *tab.* 51. *fig.* 40.

Cardium obovatum striis obsoletis longitudinalibus. LÆVIGATUM. *Da Costa. Br. Conch. p.* 178. *sp.* 18.

We have observed, that this species is in general discoloured, and deeply tinged with brown or yellow; when fine it is whitish, sleek, and covered with an epidermis.

It is found on most of our coasts, yet it is by no means common. Da Costa notes it from Yorkshire, Northumberland, Dorsetshire, Cornwall, Carnarvonshire, and the Orkneys.

PLATE LV.

MYTILUS CYGNEUS.

GREAT HORSE, OR SWAN MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat oval, one end rounded, the other extended, narrow, and compressed; thin and brittle.

MYTILUS CYGNEUS: testa ovata anterius compressiuscula fragilissima, cardine laterali. *Gmel. Linn. Syst. Nat. p.* 3355. 15.

MYTILUS CYGNEUS: concha testa oblonga ovata longitudinaliter subrugosa, postice compresso-prominulo. *Linn. Fn. Suec.* 1. *p.* 380. *No.* 1332.

Musculus latus maximus, testa admodum tenui, ex fusco viridescens, palustris. *List. App. II. An. Angl. p.* 8. *tit.* 30. *tab.* 1. *fig.* 3. *and App. II. An. Angl. in Goedart. p.* 9. *tit.* 30. *tab.* 1. *fig.* 3.—Musculus latus maximus & tenuissimus é cœruleo viridescens, fere palustris. *II. Conch. tab.* 156. *fig.* 11.

PLATE LV.

Musculus fluviatilis maximus, profunde striatus latus; testa admodum tenui, ex fusco viridescens, interdum rufescens, intus argenteus. *Gualt.* 1. *Conch. tab.* 7. *fig. F.*

Mytilus Cygneus. Swan. *Penn. Brit. Zool. No.* 78. *tab.* 67. *No.* 78.

Mytilus fluviatilis maximus, admodum tenuis ex fusco viridescens. Cygneus. *Da Costa Br. Conch. p.* 214. *sp.* 46.

This species is not uncommon in our Rivers, Ponds, &c. but is less frequent than the Mytilus Anatinus, or Small Horse Muscle, which bears some resemblance to it. Mytilus Anatinus is rarely more than half the size of Mytilus Cygneus, is more compressed, and has the cartilage side extended in a straight line to an acute angle at one end.

The usual length of Mytilus Cygneus is about two or three inches, its breadth five or six inches. The valves deep, or concave. The outside is wrinkled transversely, and varies in colour according to the state of the Shell. The external covering, or epidermis, is thin, but strong, and of a greenish colour; under this the Shell is varied with bright brown, and when the coating is worn off, the whole Shell is pearly. The inside is often rugged with small pearls.

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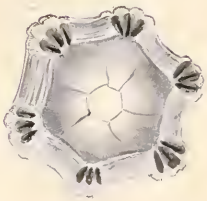

PLATE LVI.

LEPAS DIADEMA.

WHALE ACORN SHELL.

GENERIC CHARACTER.

Animal Triton. Shell of many unequal valves; affixed by a stem.

SPECIFIC CHARACTER
AND
SYNONYMS.

Shell subrotund, of six lobes, furrowed longitudinally.

LEPAS DIADEMA: testa subrotunda, sexlobata sulcata. *Gmel. Linn. Syst. Nat. p.* 3208. *sp.* 4.

Balanus balænæ cuidam Oceani Septentrionalis adhærens. *List. H. Conch. tab.* 445. *fig.* 288.

Pediculus ceti. *Phil. Trans. No.* 222. *p.* 323. *Epitome Trans. Soc. R. Angl. Vol.* 5. *p.* 381. *tab.* 17. *fig.* 2.

Pediculus ceti, vel Lepas nuda carnosa aurita. *Idem.* 1758. *Vol.* 50. *P.* 2. *tab.* 34. *fig* 1. *and fig.* 7.

Martin. *West. Isles, p.* 162 *and* 166.

Quarta species echini plani. *Rumph. Mus. tab.* 14. *fig. H.*

Balanus balænaris. *Klein. Ostrac.* 176. *tab.* 12. *fig.* 98.

Pediculus ceti. *Boccon. recher. p.* 287.

Grand pou de Baleine. *D'Avil. Cab. p.* 404.

Balanus hemisphericus sexlobatus. Balænæ. *Da Costa Br. Conch. tab.* 17. *fig.* 2. 2. 2.

PLATE LVI.

This large and interesting species of Balani is found adhering to the Whale, whence it is called the Whale Acorn Shell. It is not uncommon in the sea round Scotland. The natives of some of the Western Islands distinguish one species of Whale from the rest, for its great size, and the *big limpets* growing on their backs *. The same species is common on the Whales in the Northern Seas about Newfoundland.

The Animal is figured by Ellis, in the Philosophical Transactions for 1758, and resembles a cluster of small hooded and eared serpents issuing from the central cavity, and little openings at the tops of the longitudinal ribs. The base by which it is affixed, when alive, is covered with a coriaceous skin.

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* Martin. Fladda Chuan, near the Isle of Skie.

PLATE LVII.

VOLUTA TORNATILIS.

OVAL VOLUTE.

GENERIC CHARACTER.

Animal Limax. Shell spiral, aperture narrow, without a beak. Columella plicated.

SPECIFIC CHARACTER
AND
SYNONYMS.

Shell oval, pointed at each end, and striated spirally. Pillar lip turned in a fold.

VOLUTA TORNATILIS: testa coarctata ovata substriata: spira elevata acutiuscula, columella uniplicata. *Gmel. Linn. Syst. p.* 3437.

Buccinum parvum, rostro integro, tenuiter striatum, fasciatum, clavicula paulo productiore, unico dente ad columellam. *List. H. Conch. tab.* 835. *fig.* 58.

Auris Midæ fasciata. *Klein Ostrac. p.* 37. §. 96. *sp. I. No. I.*

Voluta tornatilis. Oval. *Penn. Br. Zool. No.* 86. *tab.* 71. *fig.* 86. Schroet. *n.* Litterat. 3. *t.* 2. *f.* 12. 13.

Ovalis. Turbo ovalis striatus rubicundus fasciis albis, columella uniplicata & unidentata. *Da Costa Br. Conch. p.* 101. *tab.* 8. *fig.* 2. 2. *sp.* 57.

PLATE LVII.

" This pretty species," says Da Costa, " I have received from Tinmouth and Exmouth, in Devonshire ;" and Pennant notes it from Anglesea only.

PLATE LVIII.

MACTRA LUTRARIA.

GENERIC CHARACTER.

Animal a Tethys. Bivalve, sides unequal. Middle tooth complicated, with a little groove on each side; lateral teeth remote.

SPECIFIC CHARACTER AND SYNONYMS.

Shell oblong oval, smooth; no lateral teeth. Hinge, a small and large triangular cavity in one valve; a similar cavity and an elevated triangular tooth in the opposite.

MACTRA LUTRARIA: testa ovali oblonga lævi, dentibus lateralibus nullis. *Gmel. Linn. Syst. p.* 3259. *sp.* 14.

Concha longa lataque in mediis cardinibus cavitate quadam pyriformi insignita.—An Chamæ glycymeris Rondeletii? *List. H. Angl. p.* 170. *tit.* 19. *tab.* 4. *fig.* 19.—Chama fusca lata planior. *Hist. Conch. tab.* 415. *fig.* 259.

The long and broad conch. *Wallis Northumb. p.* 396. *No.* 10. 11.

Mactra lutraria, large. *Penn. Br. Zool. No.* 44. *tab.* 52. *fig.* 44. *Chemnitz. Conch.* 6. *t.* 24. *f.* 240. 241.

Chama magna planior, crassa, albescens, Magna. *Da Costa Br. Conch. p.* 230. *sp.* 55. *tab.* 17. *fig.* 4.

PLATE LVIII.

The Mactra lutraria is so very similar in general appearance to the Mya Arenaria, that without attending to the foliated hinge of the latter, they may be confounded with each other. Both shells are scarce on the British coasts, except in certain situations. Da Costa says the Mactra lutraria is found in plenty at Scarborough, in Northumberland, Lancashire, &c. and on the shores of Scotland. Dr. Maton found them on the coast of Cornwall; and we met with them very fine, perfect, and beautifully coloured, on the sands near Laugharn, South Wales.

The general colour is yellowish, tinged with orange, and irregularly clouded with brown; and often glossed with a delicate white; the epidermis brown.

PLATE LIX.

TURBO STRIATUS.

STRIATED WREATH SHELL.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER AND SYNONYMS.

Shell swelled, or ventricose, white, variegated with red, and finely striated spirally. Umbilicated.

TURBO STRIATUS: albescens rufo variegatus, eleganter striatus. *Da Costa. Br. Conch. p.* 86. *sp.* 47. *tab.* 5. *fig.* 9.

Turbo reflexus: testa umbilicata convexo-prominula: anfractibus teretibus substriatis, apertura reflexa. *Gmel. Linn. Syst. Nat. p.* 3605. 70?

Cochlea cinerea, interdum leviter rufescens, striata, operculo testaceo cochleato donata.—Cochlea terrestris turbinata et striata Columnæ de purpura. *c.* 9. *p.* 18. ubi etiam delineatur sub hoc titulo, Cochlea turbinata. *List. H. An. Angl. p.* 119. *tit.* 5. *tab.* 2. *fig.* 5.

Turbo lunaris tessellatus et striatus. *Klein Ostrac. p.* 55. §. 161. *spec.* 3.

PLATE LIX.

Argenv. Conch. *I. p.* 384. *tab.* 32. *fig.* 12. *II. p.* 339. *tab.* 28. *fig.* 12.

Turbo terrestris tenuissime, ipso ore circinato, cui etiam limbus latus, et striatus, albidus, *Gualt I. Conch. tab.* 4. *fig. B.*

Turbo tumidis. Tumid. *Penn. Br. Zool. No.* 110. *tab.* 82. *fig.* 110.

This species is particularly noticed by most conchologists. Dr. Lister says it is the most elegant of all our snails, and is found near Oglethorpe and Burwell woods in Lincolnshire, in Yorkshire, and in Kent. Petiver found it about Charlton, in Kent; also Morton, in Northamptonshire; Pennant, in the woods of Cambridgeshire; and Da Costa, in Surrey. It is no where common.

PLATE LX.

TELLINA TRIFASCIATA.

THREE STREAK TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER.

Shell narrow oval, depressed, whitish, radiated with red; and striated transversely.

TELLINA TRIFASCIATA: testa ovata læviuscula sanguineo triradiata, pube rugosa. *Gmel. Linn. Syst. Nat. p.* 3233.

Tellina ex rufo maculata, fasciis exasperata. *List. H. Conch. tab.* 394. *fig.* 241.

Concha rugosa, tellinæ formis, lineola quadam paululum eminente ab ipso cardine ad imum ambitum donata. *List. App. Hist. An. Angl. p.* 19. *tit.* 36. *tab.* 1. *fig.* 8.—*App. Hist. An. Angl. in Gœdart. p.* 32. *tit.* 36. *tab.* 1. *fig.* 8.

Tellina cuneata compressa, e rubro radiata. Red Waved Bastard Tellen. *Petiv. Gazoph. tab.* 94. *fig.* 9.

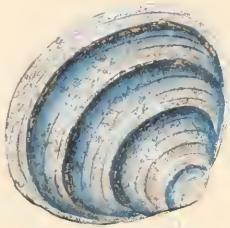
Tellina depressa transversim striata albescens e rubro radiata, Radiata. *Da Costa. Br. Conch. p.* 209. *sp.* 42. *tab.* 14. *fig.* 1.

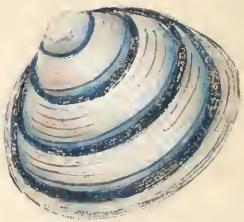
Tellina incarnata, carnation. *Penn. Br. Zool. No.* 31. *tab.* 47 *fig.* 31.

PLATE LX.

This elegant species is rather uncommon upon our coasts. Da Costa says he received it from Scarborough, in Yorkshire ; and adds, it is scarce on the coasts of Cornwall, but of a larger size ; the finest coloured specimens we have seen are from Dorsetshire and Wales.

The Tellina incarnata is smaller than trifaciata but very similar, and may be easily confounded with it.





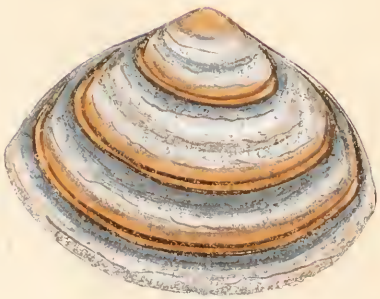


PLATE LXI.

MACTRA SOLIDA.

GIRDLED.

GENERIC CHARACTER.

Animal a Tethys, Bivalve, sides unequal. Middle tooth complicated, with a little groove on each side; lateral teeth remote.

SPECIFIC CHARACTER

AND

SYNONYMS.

Thick, transversely striated and girdled.

MACTRA SOLIDA: testa opaca læviuscula subantiqua. *Gmel. Linn. Syst. Nat. p.* 3259. *sp.* 13.

Concha crassa, ex altera parte compressa, ex altera subrotunda. *List. H. An. Angl. p.* 174. *tit.* 24. *tab.* 4. *fig.* 24.—Pectunculus crassiusculus albidus. *List. H. Conch. tab.* 253. *fig.* 87.

Chama media fasciata crassa *Petiv. Gaz. tab.* 94. *fig.* 7.

Chama minor plurimis fasciis. *Id. ib. fig.* 6.

A Pectunculus with azurine circular lines interpolated. *Leigh. Lancashire. tab.* 3. *fig.* 6.

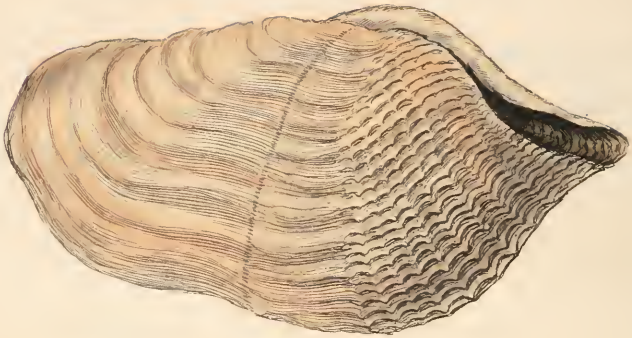
Thick white striated Chama. *Wallis Northum. p.* 395.

Mactra solida; strong. *Penn. Br. Zool. No.* 43. *tab.* 51. *fig.* 43. *A. et tab.* 52. *fig.* 43.—*Chemnitz. Conch.* 6. *t.* 23. *f.* 229. 230.

Trigonella crassa transversim fasciata. ZONARIA. *Da Costa. Br. Conch. tab.* 15. *fig.* 1. 1.

This species is found on many of our shores, as Kent, Dorsetshire, Lancashire, Yorkshire, Northumberland, the coast of Wales, &c.

The girdles are most prominent in the dead shells; the surface between them appearing much worn.



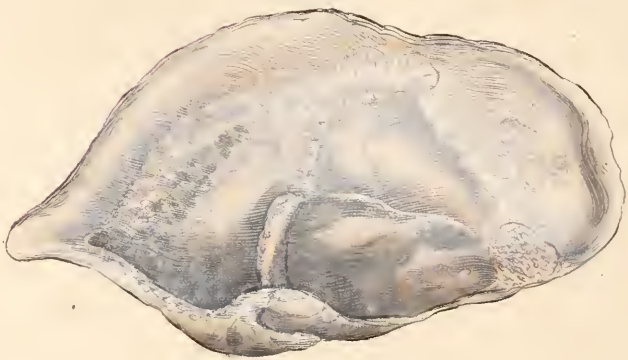


PLATE LXII.

PHOLAS CRISPATA.

CURLED, OR DOUBLE-FRONTED PIDDOCK.

GENERIC CHARACTER.

Animal Ascidia. Shell bivalve, opening wide at each end, with several lesser valves at the hinge. The hinges folded back and connected by a cartilage.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oval, thick, wrought with transverse wrinkles, and divided down the middle by a furrow. The half next the hinge undulated or indented. A large flat curved tooth in the cavity under the beak.

PHOLAS CRISPATA : testa ovali hinc obtusiore crispato striata cardinis dente curvo. *Linn. Faun. Suec.* 2125. *Gmel. Linn. Syst. p.* 3216. *sp.* 6.

Concha altera parte dimidia striis undatim crispatis donata, altera lævis, apophysi longâ, angusta, recurva, dentiformi. An é peloridibus antiquorum ? *List. H. An. Angl. p.* 192. *tit.* 38. *tab.* 5. 38.—Pholas angulosus, nobis olim, concha altera, &c. *Tit.* 38.—*App. H. An. Angl. in Goedart. p.* 36. *tab.* 2. *fig.* 7.—Pholas latus rugosus ex dimidio dorso et asper. *Hist. Conch. tab.* 279. *fig.* 436.

PLATE LXII

Concha ex dimidia pene margine profunde striata. *Merret Pin. p.* 194.

Chamæ pholas bifrons. Furrow-ribbed Pholas Muscle. *Petiver Gaz. tab.* 79. *fig.* 13.

Pholas Crispatus. Curled. *Penn. Br. Zool. No.* 12. *tab.* 40. *fig.* 12.

Pitaut, ou Dail Pholade. *Argenv. Conch.* 1. *p.* 365. *pl.* 30. *p.* 322. 26. *H.*

Pholas ovalis, parte dimidia striis undatim crispatis, altera lævis; dens longus angustus curvus. Bifrons. *Da Costa Br. Conch. p.* 242. *tab.* 16. *fig.* 4. 4.

Found in great abundance on many of our shores, nitched or burrowed in the rocks and stones in Cornwall, Lincolnshire, Yorkshire, Wales, &c.

PLATE LXIII.

ARCA NUCLEUS.

SILVERY ARK.

GENERIC CHARACTER.

Animal Tethys? Shell bivalve, equivalve. Teeth of the hinge numerous, inserted between each other.

SPECIFIC CHARACTER

AND

SYNONYMS.

Small, somewhat triangular, smooth, silvery within. Hinge semicircular, beset with numerous plate-like teeth. Margin finely crenated

ARCA NUCLEUS: testa oblique ovata læviuscula, natibus incurvis, margine crenulato, cardine arcuato. *Linn. Syst. Nat. p.* 1143. *No.* 184.

ARCA NUCLEUS: testa oblique ovata læviuscula: cardine triangulari. *Gmel. Linn. Syst. Nat. p.* 3314. *sp.* 38.

Tellina inæquilatera, margine interno minutissime dentato, sed prope cardinem denticulis spissis, elatoribus, acutis, conspicua, oleagina, intus argentea. *Gualt* 1. *Conch. tab.* 81. *fig. R.*

PLATE LXIII.

Pectunculus minimus lævis, intus argenteus, cardine serrato. Silver Cockle. *Mus. Petiv. p.* 87. *No.* 841. *et Gazop. tab.* 17. *fig.*

Glycemeris Argentea parva subtriangularis, lævis, intus argentea. *Da Costa. Br. Conch. p.* 170. *sp.* 13. *tab.* 15. *fig.* 6. *right hand.*

This kind is found in great abundance on many of our shores, as Kent, Essex, Sussex, Devonshire, &c. and is also met with at Scarborough.

When these shells are fresh and perfect, says Da Costa, the outside is of an olive green, with some few transverse wrinkles; but when rubbed or worn are quite white, and almost smooth. The inside is of a fine silvery colour.

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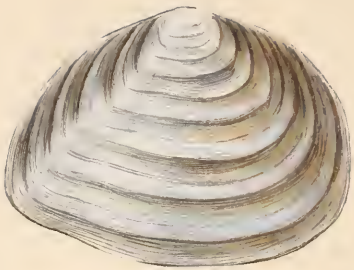

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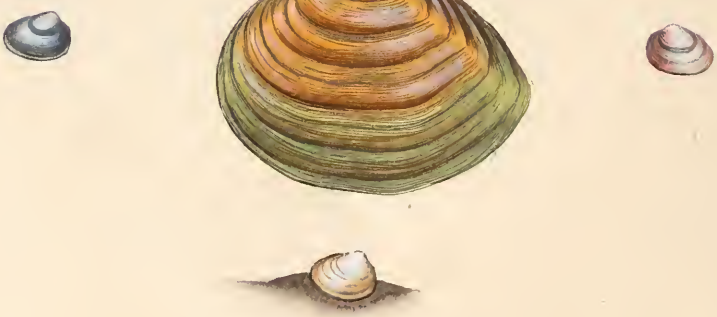

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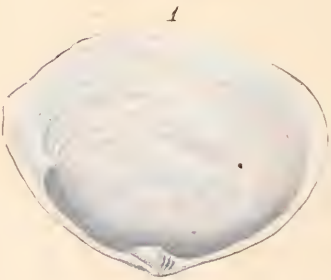


PLATE LXIV.

FIG. I.

TELLINA PLANA.

FLAT TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat triangular, thin, and flat.

TELLINA PLANA: tenuis subrotunda plana.

TRIGONELLA PLANA. *Da Costa. p.* 200. *sp.* 36.

Tellina crassa. Flat. *No.* 28.—Venus borealis. *Northern. Pen. Br. Zool. No.* 52.

Venus borealis. *Linn. Syst. Nat.?*

Concha tenuis, subrotunda, omnium minime cava, cardinis medio sinu et amplo et pyriformi. *List. II. An. Angl. p.* 174. *tit.* 23. *tab.* 4. *fig.* 23.

Pectunculus latus, admodum planus, tenuis, albidus. *List. II. Conch. tab.* 253. *fig.* 88.

Slender Smooth Chama. *Wallis Northumb. p.* 395.

In referring this ambiguous Shell to the Tellina genus, we may incur censure, as it does not certainly possess every characteristic of a tellen, yet we conceive less impropriety in altering the genera than in retaining it as a trigonella.

This Shell has been admitted as the Venus borealis of Linnæus and from the Synonyms of Lister's figure, not without probability. We do not, however, think the Linnæan descriptions agree sufficiently with our Shell; it may be a variety of it, though we hesitate to admit it as such.

Pennant has described this Shell twice, the old Shell is Tellina Crassa, No. 28, and the young one Venus borealis, No. 52 of that author; he adds indeed "the *Tellina crassa* has the habit of Venus borealis, but its sides are unequal, one being more extended than the other."

Da Costa has been under similar difficulties, he gives it as a species of his genus trigonella, though he says in the general description, that "the hinge of this kind is of a *different structure from the* TRIGONELLÆ, for it consists of two minute, thin, plate-like, parallel teeth, aside of which is a large triangular cavity, and has no lateral teeth."

Common on several of the English shores.

FIG. II.

TELLINA RIVALIS.

RIVER TELLEN.

SPECIFIC CHARACTER.

Shell oblique, somewhat ovated, furrowed transversely, and of an horn colour.

TELLINA RIVALIS : testa oblique subovata transversim sulcata cornei coloris. *Maton. Linn. Trans. vol.* 3.

The English naturalist is indebted to Dr. William Maton, author of the Tour of the Western Counties, for the discovery of this new and interesting British species. The first account of it appeared in a paper presented by him to the Linnæan Society, and afterwards inserted in their Transactions; and it is to this gentleman also our thanks are due for the specimens figured in the annexed plate. We have seen it since in the Collection of William Pilkington, Esq. Whitehall; who recently found it in the river near Hungerford in Berkshire.

Dr. Maton, in his remarks on this species, says, " It does not appear to have been described, and probably was never seen by Linnæus, nor has it been noticed by any English writer on Conchology; a figure, however, of it occurs in *Gualteri's Index, Testacrum. Conchyliorum* (*Tab.* 7. *fig. C. C.*) but has been referred to by Professor

Gmelin, in his edition of the Systema Naturæ of Linnæus for *Tellina cornea*, though it evidently differs from the latter in shape, which Linnæus considers as one of the most certain *criteria*, whereby species are to be distinguished. *Gualtieri* mentions the Shells alluded to as "*Musculus fluviatilis, striatus, subflavus pellucidus*," which is a vague and imperfect description, and by no means sufficient to shew in what respect it differs from T. cornea." The difference consists chiefly in the T. rivalis being of a more oblique and subovated form, and in having the hinge near one end; T. cornea is somewhat globose, and in particular has the hinge and beaks placed in a more central manner.

Dr. Maton has generally found Tellina rivalis on chalky parts of the bed of the river Avon, and in rivulets communicating with it near Salisbury; but has never seen it in any considerable abundance. He conceives, that if diligently sought after, it may be discovered in most rivers and streams which are inhabited by *Tellina cornea*.

PLATE LXV.

HELIX ZONARIA.

STRIPED SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted, and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell whitish, striped, convex, rather depressed. A deep round central umbilicus. Outer lip of the mouth turned backward and spread.

HELIX ZONARIA : testa umbilicata convexa depressiuscula : apertura oblongiuscula marginata. *Linn. Syst. Nat. p.* 1245. *No.* 681.—*Gmel. Linn. Syst. Nat.* 3632. *sp.* 63. *Gualt.* 1. *Conch. tab.* 3. *fig. L.L.L.*

Cochleola alba fasciata cantabrigiensis, umbilico parvo. Newmarket Heath Shell. *Petiv. Gaz. tab.* 17. *fig.* 6.

Cochlea alba leviter umbilicata pluribus fasciis circumdata, clavicula productiore. *List. H. Conch. tab.* 59. *fig.* 56.

Cochlea umbilicata alba virgata. Virgata. *Da Costa. Br. Conch. p.* 79. *tab.* 4. *fig.* 7

PLATE LXV.

The Shells figured in the annexed plate are the true C. virgata of Da Costa, but not the Helix Zonaria of Pennant, as that author has erroneously considered them in his British Conchology. It appears that the latter species came into the possession of Da Costa after the work was published, for it stands corrected in some Mss. notes in his collection, though it is not noticed in his publication. Gmelin in his Systema Natura admits Da Costa's Shell as the Linnæan Zonaria; Pennant's Shell is not described by either author.

It inhabits dry sandy soils and banks, and, as Da Costa observes, is common only in some parts, as in the grass on Heddington-heath in Oxfordshire, and in Hampshire in plenty. It is also found in Cornwall, and was met with by Petiver on Newmarket-heath in Cambridgeshire.

PLATE LXVI.

BULLA PALLIDA.

PALE, OR CYLINDRIC BULLA.

GENERIC CHARACTER.

Shell suboval. Aperture oblong, very patulous, and smooth or even. One end rather convoluted.

SPECIFIC CHARACTER.

Cylindric, white, glossy, four prominent wrinkles on the pillar lip.

BULLA PALLIDA : testa cylindrica, spira elevata acuta. *Linn. Mus. Reg. p.* 588. *No.* 223.

Voluta pallida testa integra oblongo ovata, spira elevata columella quadruplicata. *Linn. Syst. Nat. p.* 1189. *No.* 405.

Concha veneris, exigua, alba, vere cylindracea. *List. H. An. Angl. tab.* 714. *fig.* 70.

Porcellana integra admodum tenuis, fimbriata ; dorso pulvinato, candidissima. *Gualt.* 1. *Conch. tab.* 15. *fig.* 4.

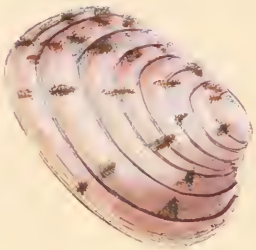
Bulla, cylindracea, cylindric. *Penn. Br. Zool. No.* 85. *tab.* 70. *fig.* 85.

Bulla exigua cylindracea, lævis et nivea. *Da Costa Br. Conch. p.* 30. *sp.* 16. *tab.* 2. *fig.* 7.

PLATE LXVI.

Bulla cylindricea is esteemed a very rare species by collectors of English Shells. It is found on the western coasts of England. Da Costa received them from Cornwall and Weymouth; and Lister notes them from Barnstaple in Devonshire.

The smallest figures denote the natural size.



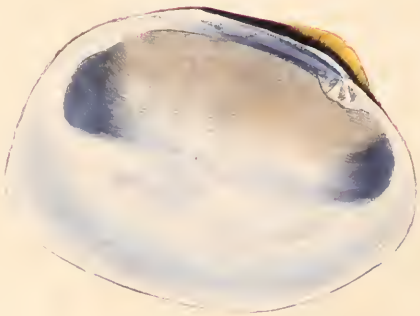


PLATE LXVII.

VENUS DECUSSATA.

RETICULATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat oval, wrought with transverse and longitudinal striæ, or prominent ridges, which cross or decussate each other; outside brown, inside white, with violet spots near the hinge.

Cuneus reticulatus, longitudinaliter et transversim vel decussatim striatus, subrufus, intus ex parte violaceus. Reticulatus. Reticulated Purr. *Da Costa Br. Conch. p.* 202. *tab.* 14. *fig.* 4. 4.

Venus Decussata: testa ovata antice angulata decussatim striata. *Linn. Syst. Nat. p.* 1133. *No.* 149. *Mus. Reg. p.* 509. *No.* 77 ?

Concha quasi rhomboides, in medio cardine utrinque circiter tribus exiguis denticulatis donata. *List. H. An. Angl. p.* 171. *tit.* 20. *tab.* 4. *fig.* 20.

PLATE LXVII.

Chama fusca striis tenuissimis donata. *List. Hist. Conch. tab.* 423. *fig.* 271.*

Chama Purrs anglice dicta, et Tellina fasciata compactilis radiata intus ex parte subaurea, interdum subpurpurea. *List. Exercit. Anat.* 3. *p.* 25. 27. *tab.* 3.—*Wallace Orkn. p.* 42.—Chama nostras striis capillaceis. *Mus. Petiv. p.* 83. *No.* 811.

Purra fasciata et radiata. Cornwall Purr. *Petiv. Gaz. tab.* 95. *fig.* 8.—Chama, Purrs. *Dale Harw. p.* 387. *No.* 5.

Venus litterata, lettered. *Penn. Brit. Zool. p.* 96. 53.

The young Shells of this species vary considerably in their colours and markings, but are in general remarkable for their elegance; as they encrease in growth, those colours and markings gradually fade, and in old Shells become altogether obscure. It is found in plenty on most of the southern coasts of England and Wales.

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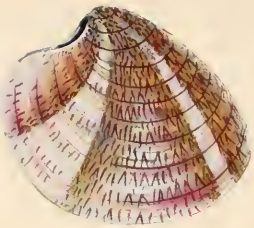
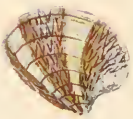
* Gmelin makes a new species of Lister's shell in the Systema Naturæ, under the name *obscura*, without noticing any other author who describes the same kind "*Venus obscura* testa fusca: striis perpendicularibus tenuissimis, p. 3289. sp. 99."





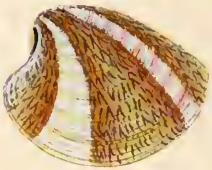


PLATE LXVIII.

VENUS STRIATULUS.

STRIATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER.

Shell somewhat heart-shaped, and marked with three or four longitudinal rays of brown.

PECTUNCULUS STRIATULUS parvus transversim striatus fusco radiatus. *Da Costa. Br. Conch. p.* 191. *sp.* 27. *tab.* 12. *fig.* 2. 2.

Venus Gallina testa subcordata radiata: striis transversis obtusis, cardinis dente postico minimo, margine crenulato. *Linn. Syst. Nat. p.* 1130. *No.* 119.—*Fn. Sv.* 2. *No.* 2143?

This is one of the most elegant of the British Shells. It is found on the coasts of Dorsetshire, Cornwall, and the isles of Scilly, and also on those of Wales. The general colour is pale flesh colour,

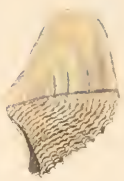


PLATE LXIX.

PHOLAS PARVUS.

SMALL PIDDOCK.

GENERIC CHARACTER.

Animal ascidia. Shell bivalve, opening wide at each end, with several lesser valves at the hinge. The hinges folded back and connected by a cartilage.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oval, thin, wrought with transverse wrinkles, and divided down the middle by a furrow. The half next the hinge undulated or indented. A slender and oblique curved tooth in the cavity under the beak. Size of a hazel nut.

Pholas Parvus. Little. *Pen. Br. Zool. sp.* 13.

Pholas Parvus: simillima tota structura Pholade Bifronte. *Da Costa Br. Conch. p.* 247. *sp.* 67.

This shell was first described by Pennant in his Zoology; he says it very much resembles the Pholas crispatus but is never found larger than a hazel nut. Da Costa describes it also, but doubts whether it

is a diſtinct species or only a young shell of that kind. As both authors have however figured and described it separately, we have given it a place as a distinct, or at leaſt doubtful species.

Pennant says he found these shells in masses of fossil wood in the shores of Abergelli in Denbighshire: the bottom of their cells were round and appeared as if nicely turned with some instrument. According to this author they will also perforate the hardest oak plank that is accidentally lodged in the water. Da Costa says they are found in great quantities on the same coasts as the other kind (Pholas crispatus) nitched in the rocks and stones, and adds that there is an amazing abundance at Scarborough and Whitby in Yorkshire, nitched in the Alum and other stones.

PLATE LXX.

MYTILUS BARBATUS.

BEARDED MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Short, ventricose, obtuse, ferruginous yellow. An oblique space extending from the hinge to the apex; covered with a rude epidermis and irregular filaments.

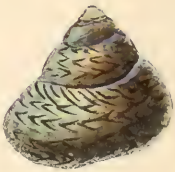
MYTILUS BARBATUS: testa læviuscula ferruginea exterius apice barbata. *Fn. Suec.* 2157. *Gmel. Linn. Syst. Nat. p.* 3353. *sp.* 10. *Chemn. Conch.* 8. *t.* 84. *f.* 749.

In trawling for marine productions in the Straits that divides Caernarvon from Anglesea (Menai) last summer, we found several specimens of the Mytilus barbatus of a much larger size than any hitherto

described by authors, as the figures in the annexed plate will fully express.

Da Costa has not noticed this species, though it must have been known to him from the figures and descriptions in Pennant's Zoology, where it stands under the name of M. Curtus. *sp.* 76. *A.* Short. Pennant's specimen scarcely exceeds the size of the second specimen figured in our plate;—it was described from a Shell in the Portland Cabinet, that had been taken at Weymouth.

Linnæus mentions this species in the Fauna Suecica. Gmelin quotes the Works of Chemnitz for its figure, where it appears somewhat smaller than in those of Pennant. It is certainly very scarce.



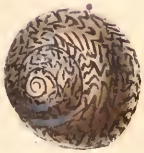


PLATE LXXI.

TURBO LINEATUS.

STREAKED.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Somewhat conic. Ash colour variegated with fine streaks and irregular marks of black; a rude tooth at the top of the pillar.

TURBO LINEATUS: trochiformis cinereus lineis aut lituris nigris insignitus, columella subdentata. *Da Costa Br. Conch. p.* 100. *sp.* 56. *tab.* 6. *fig.* 7.

We believe this species is rather an uncommon, or at least local kind on the British shores, though Da Costa says it is found on the coasts of Devonshire, Cornwall, Dorsetshire, Pwllhely in Caernarvonshire, and in plenty on the coasts of Norfolk. The collection of that author contains but a single specimen, it is a worn Shell and indifferently expressed by the figure above quoted. The most characteristic Shells of this species we have seen, we found on the rocky

shores of Aberfraw, on the western side of Anglesea, and at Manachty the remotest part of the same island.

This Shell is large, thick, and conic or shaped like a trochus. The general colour is ashen with little variation, the lines in some are dark or almost black, in others of a pale brown, or brown tinged with red; when the external covering is worn off the Shell appears of a fine mother of pearl.

Turbo lineatus is not described by any English Author except Da Costa.

1

2

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PLATE LXXII.

TURBO PERVERSUS.

REVERSED, OR OAT.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Taper, somewhat transparent. Spires turn from left to right. Mouth jagged or beset with teeth.

TURBO PERVERSUS: testa turrita pellucida, anfractibus contrariis apertura edentula. *Linn. Syst. Nat. p.* 1240. *No.* 650.

Cochlea testa pellucida oblonga, spiris decem sinistrorsis, apertura subrotunda. *Linn. Faun. Suec.* 1. *p.* 372. *No.* 1300. 2. *No.* 2172.

Buccinum pullum, opacum, ore compresso, circiter denis spiris fastigiatum. *List. H. An. Angl. p.* 123. *tit.* 10. *tab.* 2. *fig.* 10.

Buccinum exiguum pullum duodecim orbium. *List. H. Conch. tab.* 41. *fig.* 39. *Maj. et. min.*

PLATE LXXII.

Buccinum alterum pellucidum subflavum, intra senas circiter spiras mucronatum. *List. H. An. Angl. p.* 124. *tit.* 11. *tab.* 2. *fig.* 11.—*Phil. trans. No.* 105. *fig.* 11.

The small Whirl Snail, with numerous rounds, and winding from the mouth towards the right hand. *Grew. Mus. p.* 132.—*Morton Northampt. p.* 415.—Et Buccinum heterostrophum minutum fuscum sex spirarum ore subrotundo. *Id. p.* 416. *tab.* 13. *fig.* 1.

Buccinulum Anglicum heterostrophon oblongum striis capillaceis. *Petiv. Mus. p.* 65. *No.* 703.

Turbo perversus. Reversed. *Penn. Br. Zool. No.* 116. *tab.* 82. *fig.* 116.

Strombiformis parvus pullus, ore compresso, anfractibus contrariis striatis. PERVERSUS, Reversed Oat. *Da Costa Br. Conch. p.* 107. *tab.* 5. *fig.* 15. 15.

This is one of the heterostrope Shells, or such as have the mouth placed on the right side instead of the left, as is usual in most species. In general, heterosphe Shells are mere accidental varieties only of such as turn in the usual manner*; but in the present instance, it constitutes a striking character of the species itself.

It is a matter of some difficulty to reconcile the various opinions of authors respecting the several varieties and growths of this species; Da Costa has entered into the enquiry; and the result of his remarks appear at least satisfactory to us.

---

* Reversed shells of the common garden snail have been found, though very rarely. One is mentioned by Dr. Latham in his Synopsis of Birds.

" These smaller ones," says Da Costa, " are the young Shells, but always with them are found old ones of double or treble the size; in every other respect like these, but proportionally larger and stronger in their several parts and work. The plaits or foldings near the mouth are deep and very strong; the striæ stronger and more distinct; the border round the mouth greatly turned outwards, very broad, flat, thick, milk white, and the sinuosities, jags or teeth, within, are large, white, and very conspicuous; some are bidentated, and most of these old ones have eleven, and some even twelve spires.

" From these circumstances, authors run into confusion, by making the different growths different species. The accurate and judicious Lister himself has formed two species, in his tit. 19. and 11. on the difference of the number of the spires and other slight particulars. The several figures in Gualtieri are only varieties; and the bidens of Linné, Syst. Nat. p. 1240. No. 649. and of Mr. Pennant, Brit. Zool. No. 117. tab. 81. fig. 117. is apparently no other than an old Shell, for such large and bidentated ones I have not unfrequently found nestled with these common smaller Shells.

" Though the number of spires in a Shell is a criterion, yet it is not an infallible one, for the number of spires vary in some species, either from the growths or sexes: in such cases the young Shells have always a less number, and the males have their spires less numerous than the females. This very species is, perhaps, as strong an instance of the difference in the number of the spires as can be, for it is found from six to twelve spires, as Linné has also noted in his Fauna Suecica."

Linnæus, and Gmelin in his last Systema Naturæ, distinguish the

two species Bidens and Perversus chiefly by the number of teeth. The latter is described with three teeth, the former of course with only two. Fig. 1. 1. denotes the natural size. Fig 2. magnified.

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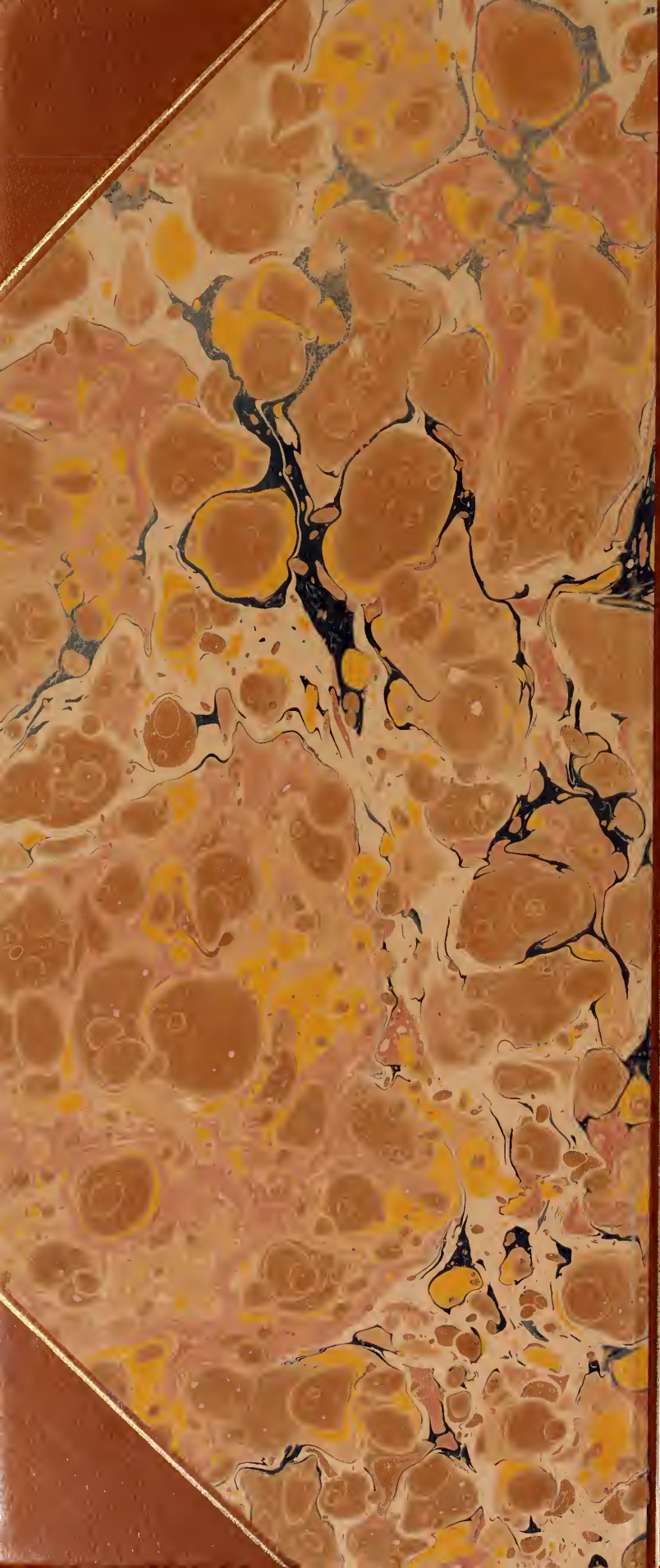
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